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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
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08/703,767 08/27/96 MOURA

E 225019

EXAMINER

LM61/1215

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FARKAS & MANELLI, P.L.L.C.  
1233 20TH STREET, SUITE 700  
WASHINGTON DC 20036-2396

HQM, S	PAPER NUMBER
ART UNIT	11

2732

DATE MAILED: 12/15/97

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 5-19-97

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 21, 29-54 is/are pending in the application.  
Of the above, claim(s) 1-20, 22-28 is/are withdrawn from consideration.  
☐ Claim(s) \_\_\_\_\_ is/are allowed.  
☒ Claim(s) 21, 29-54 is/are rejected.  
☐ Claim(s) \_\_\_\_\_ is/are objected to.  
☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.  
☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.  
☒ The proposed drawing correction, filed on 8-27-96 is ☒ approved ☐ disapproved.  
☒ The specification is objected to by the Examiner.  
☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  
☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.  
☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_  
☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of Reference Cited, PTO-892  
☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 1  
☐ Interview Summary, PTO-413  
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948  
☐ Notice of Informal Patent Application, PTO-152

—SEE OFFICE ACTION ON THE FOLLOWING PAGES—

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Part III DETAILED ACTION

*Response to Arguments*

1. Applicant's arguments filed 5-19-97 have been fully considered but they are not persuasive.

*Specification*

2. The substitute specification of May 19, 1997 was not entered because it did not include all the amendments of the original specification. Applicant is required to submit a more legible copy of the specification accompanied by a statement that the attached specification is a copy of the specification and any amendments thereto which were filed in the Office because of missing words in middle of page 21 and fading at bottom of pages and it is difficult to tell whether punctuation marks are periods or commas or what.

*Claim Objections*

3. Claims 40 and 52 are objected to because of the following informalities: in claim 40 lines 3-4 delete "a CATV" and "an over-the-air" and insert ---said CATV--- and ---said over-the-air---, respectively. In claim 52 line 16 delete "control packet" and insert ---control packets---, and in line 17 delete

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"a volume of data" and insert ---said volume of data--- for clarity. Appropriate correction is required.

*Claim Rejections - 35 USC § 112*

4. Claims 21-40, 46, 48, and 50-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 21 lines 5 and 7 which recite "a first node" and "a second node" is not clear as to whether they're reciting ---said first node--- and ---said second node--- of lines 2-3, respectively, or what. In claim 33 line 1-2 which recite "said information transfer credit" lacks clear antecedent basis because no information transfer credit has been previously recited in the claim 21 and therefore the limitation is not clearly understood. In claims 34 and 35 lines 2 and 1, respectively, which recite "a credit" is not clear as to whether they're reciting ---said credit--- of claim 1 line 5 or what. In claim 36 line 6 which recite "said credit signals" is not clear as to whether it is reciting ---said credit control packets--- of line 4 or what. In claim 39 line 3 which recite "said host" lacks clear antecedent basis; further it is not clear as to whether it is reciting ---said server--- or what. In claim 46 lines 2 and 5 and claim 48

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line 2 which recite "said shared medium" lacks clear antecedent basis. In claim 48 line 3 which recite "said direct satellite broadcast" is not clear as to whether it is reciting ---said direct broadcast satellite--- of line 2 or what; further line 4 which recite "said broadcast" lacks clear antecedent basis. In claim 50 line 4 which recite "an upstream channel" is not clear as to whether it is reciting ---said upstream channel--- or what and in line 5 which recite "a remote client" is not clear as to whether it is reciting ---one of said remote clients--- or what. In claim 51 line 11 which recite "a remote client" is not clear as to whether it is reciting ---said at least one of said remote clients--- or what. In claim 52 lines 4, 6, 7, 10, and 11 which recite "said remote devices," "said remote clients," and "said client devices" lacks clear antecedent basis. In claim 53 lines 7-8 and 10 which recite "a remote client" and "said remote client" are not clear as to whether they're reciting ---said at least one of said remote clients--- or what; further lines 10 and 11 which recite "said authorized volume" and "said updated credit signal" lacks clear antecedent basis. In claim 54 line 5 delete duplicate words "over a shared," for clarity, and in line 11 which recite "said remote devices" is not clear as to whether it is reciting ---said at least one remote device--- or what.

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Claims 29-32, 37, and 38 are rejected under 35 U.S.C. 112, second paragraph because they depend from claims 21 and 36.

*Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371<sup>©</sup> of this title before the invention thereof by the applicant for patent.

6. Claims 21, 29-31, 35, 36, 38, and 39 are rejected under 35 U.S.C. § 102(e) as being anticipated by Ramakrishnan et al.

Ramakrishnan et al. disclose all the subject matter now claimed. Note col. 8 lines 30-39 which recite the exemplary credit-based ATM flow control system including a transmitter portion of an upstream ATM switch sending an ATM cell whereby the credit field is carrying a credit for a transmitter portion of a downstream ATM adapter wherein a credit is simply an okay to send one or more ATM cells on a VCI, with the assurance that the cell(s) will have a buffer at the remote end and hence not experience loss clearly anticipate the two way network

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communication system including a method of administering transfers of information between nodes comprising the step of issuing a credit for a first node which enables a transfer of a set amount of information from said first node as in claims 21 and 36 and transferring information to the remote devices as in claim 36. Col. 9 lines 34-48 which recite the host on the downstream end of the link, upon receipt of the resynchronization request, requests the adapter to insert a chaser packet in the receive direction for that VC clearly reads on the server that transfers information to the remote devices as in claim 36. Col. 8 lines 55-65 which recite the receiver portion of the upstream ATM switch receiving the ATM cell from the transmitter portion of the downstream ATM adapter and storing it in its local memory clearly anticipate the step of receiving at a second node an amount of information corresponding to the credit. Col. 9 lines 34-48 which recite the adapter inserting a chaser packet in the VC whereby when the chaser packet is received by the host, it indicates that all the packets and cells of partially reassembled packets have been delivered by the adapter clearly anticipate the step of sending a message to the second node indicative of the amount of information remaining to be sent as in claims 21 and 31. Col. 1 lines 31-40 which recite the virtual circuits

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allowing the common physical links to be shared among multiple users clearly anticipate the step of providing a shared channel over which nodes transfer information as in claims 29, 30, and 39. Fig. 2 shows and Col. 3 line 56 to col. 4 line 2 recite the ATM cell including the virtual channel identifier (VCI) fields clearly anticipate the credit signal indicative of one of a rate, frequency and channel to be used by the node to transfer information as in claim 35. Col. 4 line 59 to col. 5 line 12 which recite the adapter connected to the network by a network connection line whereby the adapter has a first-in-first-out (FIFO) queue for receiving cells from the network and the adapter also has a microprocessor, i.e. controller, clearly anticipate the controller which couples the physical layer of the upstream and downstream channels as in claim 38.

7. Claims 41 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Zheng et al. in US patent no. 5,432,824.

Zheng et al. disclose all the subject matter now claimed. Note Fig. 2 which shows and col. 4 lines 26-39 which recite the credit update cells being applied to a credit manager which generates a signal to the cell rate generator to provide an

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allowed cell rate value to be applied to a rate controller which controls the rate at which cells at the input are permitted to be transmitted and whereby each time a cell is transmitted, the fact of this transmission is indicated to the credit manager via a "cell out" signal clearly anticipate the network manager coupled to the communication channels to issue information transfer credits indicative of an authorized volume of data to be transferred by the remote device and upon a transfer of information by the remote device, a done message is sent to the network manager as in claims 41 and 42.

***Allowable Subject Matter***

8. Claims 32-34, 37, 40, and 43-50 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. Claims 51-54 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office action.



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**Conclusion**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Moura et al. disclose an asymmetric hybrid access system and method.

Zheng in US Patent No. 5,515,359 discloses a credit enhanced proportional rate control system.

11. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

or faxed to:

(703) 305-9051, (for formal communications  
intended for entry)

Or:

(703) 308-5403, (for informal or draft  
communications, please label "PROPOSED" or  
"DRAFT")

Hand-delivered responses should be brought to Crystal  
Park II, 2021 Crystal Drive, Arlington. VA., Sixth  
Floor (Receptionist (703) 305-4700).

Serial Number: 08/703,767

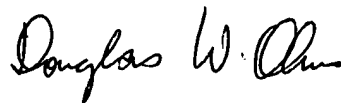
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick Hom whose telephone number is (703) 305-4742.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4750.

SH  
November 30, 1997



DOUGLAS W. OLMS  
SUPERVISORY PATENT EXAMINER  
ART UNIT 263